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45216 7590 07/24/2007 Kunzler & McKenzie 8 EAST BROADWAY SUITE 600 SALT LAKE CITY, UT 84111			EXAMINER	
			CHANNAVAJJALA, SRIRAMA T	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application No.	Applicant(s)		
		10/718,420	CORCORAN ET AL.		
	Office Action Summary	Examiner	Art Unit		
		Srirama Channavajjala	2166		
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet with t	he correspondence address		
A SH WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DAINS of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Operiod for reply is specified above, the maximum statutory period vure to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing led patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION OF THIS COMMUNICATION OF THIS SECTION OF THIS SECTIO	TION. be timely filed 6 from the mailing date of this communication. DONED (35 U.S.C. § 133).		
Status					
1)⊠	Responsive to communication(s) filed on 07 M	lay 2007.	•		
2a)⊠	This action is <b>FINAL</b> . 2b) This action is non-final.				
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is				
	closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 1	1, 453 O.G. 213.		
Disposit	ion of Claims				
5)□ 6)⊠ 7)□	Claim(s) 1-15,17-22,24 and 26-40 is/are pendidal Of the above claim(s) is/are withdraw Claim(s) is/are allowed.  Claim(s) 1-15,17-22,24 and 26-40 is/are rejected to.  Claim(s) is/are objected to.  Claim(s) are subject to restriction and/or	wn from consideration.			
Applicat	ion Papers				
•	The specification is objected to by the Examine				
10)	The drawing(s) filed on is/are: a) according to the drawing a				
	Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct	• • • • • • • • • • • • • • • • • • • •	` '		
11)	The oath or declaration is objected to by the Ex	- · · · ·			
Priority (	under 35 U.S.C. § 119				
12) <u>□</u> a)	Acknowledgment is made of a claim for foreign  All b) Some * c) None of:  1 Certified copies of the priority document:  2 Certified copies of the priority document:  3 Copies of the certified copies of the priority application from the International Bureau  See the attached detailed Office action for a list	s have been received. s have been received in Appl rity documents have been rec u (PCT Rule 17.2(a)).	lication No ceived in this National Stage		
Attachmer  1) Notice	nt(s) ce of References Cited (PTO-892)		mary (PTO-413)		
2) Notice 3) Information	ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/SB/08) er No(s)/Mail Date	Paper No(s)/M	lail Date mal Patent Application		

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#### **DETAILED ACTION**

### **Response to Amendment**

- 1. Claims 1-15,17-22,24,26-40 are presented for examination.
- 2. Examiner acknowledges applicant's amendment filed on 5/7/2007.
- 3. Claims 1-12,13,29,40 have been amended [5/7/2007].
- 4. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed 1/19/2007 in this application after final rejection.

  Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/19/2006 has been entered and a non-final Office action was mailed on 2/5/2007.
- 5. Claims 1,13,17-18,26 have been amended [12/19/2006].
- 6. Claims 16,23,25 have been cancelled [12/19/2006].
- 7. Examiner acknowledges applicant's amendment filed on 8/25/2006.
- 8. Claims1, 13,18,27,40 have been amended [8/25/2006].

#### **Drawings**

9. The Drawings filed on 11/20/2003 are <u>acceptable</u> for examination purpose

#### 35 USC § 101

10. In view of applicant's amendment to claims 1-12, and remarks at page 11-15, the rejection under 35 USC 101 as set forth in the previous office action is hereby withdrawn.

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# 35 USC § 112

11. In view of applicant's amendment to Claim 1,13, 29-36, remarks at page 15-16, the rejection under 35 USC 112 as set forth in the previous office action is hereby withdrawn.

### Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 13. Claims 1-14,17-22,26-27,29-36,38-40 are rejected under 35 U.S.C. 102(e) as being anticipated by Sharon et al. [hereafter Sharon], US Publication No. 20030229707 filed on June 6, 2002, published on Dec 11,2003.
- 14. As to claim 1, Sharon teaches a system which including 'a computer readable storage ,medium storing a self-descriptive binary data structure [page 3, col 1, claim 6] executable on a computer processor for communicating binary data, between a source device and a target device, the computer readable storage medium [fig 1, fig 5, page 2, col 1, 0022, line 1-2, 0026, line 1-4, ], self-descriptive binary data structure corresponds to Sharon's fig 5, s-records, because "s-records" are essentially character strings made

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of several fields which identify the record type, record length, memory address, code, data and checksum, furthermore, each byte of binary data is encoded as a 2-character hexadecimal number is part of the S-record data structure [page 2, 0016-0019]; It is further noted that Sharon specifically suggests "data structure on a computer readable medium" as detailed in page 3, col 1; communicating binary data between source device and a target device corresponds to host computer communicating with target system over a communication link as detailed in fig 1;

'a plurality of data segments, each of the plurality of data segments comprising a segment header and a data field, the segment header descriptive of the corresponding data segment' [page 2, col 1, 0015, line 2-5], Sharon specifically teaches records holding a description of file or a data containing program code in a specific location or address, further data segment typically one of the section of data or code as detailed in page 2, col 1, 0015;

'a target data set within the data field [page 2, col 1, line 3-5], target data set corresponds to target system where data to be loaded as detailed in page 2, col 1, line 3-5;

a data structure descriptor descriptive of the data structure, the data structure descriptor identifying the location of the target data set within the data field ' [page 2, col 1, 0020], Sharon specifically teaches memory address for each S- record is part of the data structure that identifying the start address, further descriptor or header is integral part of memory.

15. As to claim 2, Sharon disclosed 'a customizable directory descriptor, the customizable descriptor configured to provide a directory of the data stored in each of the data fields within the data structure [page 2, col 1, 0021].

- 3. As to claim 3, Sharon disclosed 'wherein the target data set comprises a bootstrap executable, the bootstrap executable configured to reference the customizable directory descriptor and to identify a location of a second target data. set within the data structure using the customizable directory descriptor' [page 1, col 1, 0004, page 2, col 1, 0021].
- 16. As to claim 4, Sharon disclosed wherein the bootstrap executable is further configured to access the second target data set within the data structure' [page 1, col 1, 0004].
- 17. As to claim 5, Sharon disclosed 'a data structure version descriptor configured to indicate a version of the data structure' [page 1, col 1, 0003].
- 18. As to claim 6, Sharron disclosed 'a data structure name descriptor configured to indicate a name of the data structure' [page 1, col 2, 0013, line 1-2]
- 19. As to claim 7, Sharon disclosed, 'a data structure type descriptor configured to indicate a type of the data structure' [page 1, col 2, 0013]..

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20. As to claim 8, Sharon disclosed 'a data structure count descriptor configured to indicate a number of the plurality of data segments within the data structure' [page 2, col 1, 0015, line 2-5].

- 21. As to claim 9, Sharon disclosed 'the target data set is an executable' [page 1, col 1, 0004]...
- 22. As to claim 10, Sharon disclosed 'the target data set is a code image' [page 1, col 2, 0012, line 8-16], code image corresponds to Sharon's "Intel standard Hex files" used to burn the program into EPROM,PROM as detailed in page 1, col 2, 0012, line 8-16]
- 23. As to claim 11, Sharon disclosed 'one of the plurality of data segments is an alignment data segment configured to align the size of the data structure for at least one of error detection and correction' [page 1, col 2, 0014].
- 24. As to claim 12, 35, Sharon disclosed the data segment header comprises a flag field configured to store a flag, the flag descriptive of the data stored in the data field' [page 2, col 1, 0022].

25. As to claim 13, Sharon teaches a system which including 'a system for communicating binary data using a self-descriptive binary data structure' [page 1, col 1, 0009, col 2, 0012, line 1-3, fig 1, fig 5], Sharon teaches exchange of programs and data between computer systems, more specifically, files typically include ASCII encodings of hex instruction codes for transmission over a data link for example using RS-232 [see 0003], data structure corresponds to S-record or HEX record data structure as detailed in page 1, 0009;

'the system comprising: a communications channel' [page 1, col 1, 0003, line 12-13, fig 1, col 2, line 1-3, element 104, communications channel corresponds to communications link as detailed in fig 1, element 104;

'a source communication device connected to the communications channel and configured to transmit a self-descriptive binary data structure, and a target communication device connected to the source communications device via the communications channel and configured to receive the self-descriptive binary data structure from the source communication device' [fig 1, page 1, col 2, 0012], Sharon specifically teaches host and target computer system are connected through communication link, further both host and target system loading, checking and parsing programs received over communication link, further Sharon specifically suggests S-record and Intel HEX formats and other text based formats for transport of programs and data to embedded target system, that corresponds to configured to receive the self-descriptive binary data structure from the source communication device;

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self-descriptive binary data structure corresponds to Sharon's fig 5, s-records, because "s-records" are essentially character strings made of several fields which identify the record type, record length, memory address, code, data and checksum, furthermore, each byte of binary data is encoded as a 2-character hexadecimal number is part of the S-record data structure [page 2, 0016-0019]; It is further noted that Sharon specifically suggests "data structure on a computer readable medium" as detailed in page 3, col 1, claim 6; communicating binary data between source device and a target device corresponds to host computer communicating with target system over a communication link as detailed in fig 1;

'a plurality of data segments, each of the plurality of data segments comprising a segment header and a data field, the segment header 'descriptive of the corresponding data segment' [page 2, col 1, 0015, line 2-5], Sharon specifically teaches records holding a description of file or a data containing program code in a specific location or address, further data segment typically one of the section of data or code as detailed in page 2, col 1, 0015;

a target data set within the data field [page 2, col 1, line 3-5], target data set corresponds to target system where data to be loaded as detailed in page 2, col 1, line 3-5;

a data structure descriptor descriptive of the data structure, the data structure descriptor configured to identify the location of the target data set within the data field ' [page 2, col 1, 0020], Sharon specifically teaches memory address for each S- record

is part of the data structure that identifying the start address, further descriptor or header is integral part of memory.

- 26. As to the claim 14, Sharon disclosed 'wherein the source communication device is further configured to generate the self-descriptive binary data structure' [page 1, col 2, 0012, line 8-10].
- 27. As to claim 17, Sharon disclosed 'wherein the executable comprises a bootstrap executable, the bootstrap executable configured to access a code image within the data structure' [page 1, col 1, 0004].
- 28. As to claim 18, Sharon teaches a system which including 'a method for communicating binary data using a self-descriptive binary data structure' [fig 5, page 2, col 2, col 1, 0022, line 1-2, 0026, line 1-4], self-descriptive binary data structure corresponds to Sharon's fig 5, S-records, because "s-records" are essentially character strings made of several fields which identify the record type, record length, memory address, code, data and checksum, furthermore, each byte of binary data is encoded as a 2-character hexadecimal number is part of the S-record data structure [page 2, 0016-0019];

'generating a self descriptive binary data structure comprising: a plurality of data segments, each of the plurality of data segments comprising a segment header and a data field, the segment header descriptive of the corresponding data segment '[page 2,

col 1, 0015, line 2-5], Sharon specifically teaches records holding a description of file or a data containing program code in a specific location or address, further data segment typically one of the section of data or code as detailed in page 2, col 1, 0015; self-descriptive binary data structure corresponds to Sharon's fig 5, S-records because "s-records" are essentially character strings made of several fields which identify the record type, record length, memory address, code, data and checksum, furthermore, each byte of binary data is encoded as a 2-character hexadecimal number is part of the "s-record" data structure [page 2, 0016-0019];

'a target data set within the data field'[page 2, col 1, line 3-5], target data set corresponds to target system where data to be loaded as detailed in page 2, col 1, line 3-5;

'a data structure descriptor to the plurality of data segments, the data structure descriptor descriptive of the data structure' [page 1, col 2, 0014-0015, fig 2], Sharon specifically suggests each s-record file is individually identified and labeled for example type, record length, address, code/data and checksum is part of the descriptive of the data structure; further, as best understood by the examiner, typically "segments" are part of the memory because memory associated with a process that can contain dynamically allocated data for example as detailed in fig 2, the first S-record has a data start address, the data is to be loaded sequentially into memory [page 2, col 1, 0020, line 4-11]

'communicating the self descriptive binary data structure with a communications interface coupled with a target device' [fig 1, page 1, col 2, 0012, line 1-8], Sharon

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specifically teaches "S-record" structure corresponds to self descriptive binary data structure, further, Sharons fig 1 also suggests establishing communication between host and target computer system, target device corresponds to Sharon's target device element 106;

'processing an executable that is stored in the self-descriptive binary data structure' [page 2, col 1, 0015, line 3-6], Sharon teaches processing S1-S3 records identify the line as containing program code or data as detailed in page 2, 0015.

29. As to claim 29,40, Sharon teaches a system which including 'a method for communicating binary data using a self-descriptive binary data structure' [fig 5, page 2, col 2, col 1, 0022, line 1-2, 0026, line 1-4], self-descriptive binary data structure corresponds to Sharon's fig 5, S-records, because "s-records" are essentially character strings made of several fields which identify the record type, record length, memory address, code, data and checksum, furthermore, each byte of binary data is encoded as a 2-character hexadecimal number is part of the S-record data structure [page 2, 0016-0019];

'generating a plurality of data segments, each of the plurality of data segments comprising a segment header and a data field, the segment header descriptive of the corresponding data segment ' [page 2, col 1, 0015, line 2-5], Sharon specifically teaches records holding a description of file or a data containing program code in a specific location or address, further data segment typically one of the section of data or code as detailed in page 2, col 1, 0015;

'attaching a data structure descriptor to the plurality of data segments, the data structure descriptor descriptive of the data structure' [page 1, col 2, 0014-0015, fig 2], Sharon specifically suggests each s-record file is individually identified and labeled for example type, record length, address; code/data and checksum is part of the descriptive of the data structure;

'identifying a target data set within the data field'[page 2, col 1, line 3-5], target data set corresponds to target system where data to be loaded as detailed in page 2, col 1, line 3-5;

'storing a location of the target data set in the data structure descriptor' [page 2, col 2, 0025, line 4-5];

'sending the self-descriptive binary data structure to a target device' [see fig 1,fig 5, page 1, col 2, 0012, page 2, col 2, 0026], self-descriptive binary data structure corresponds to Sharon's fig 5, s-records, because "s-records" are essentially character strings made of several fields which identify the record type, record length, memory address, code, data and checksum, furthermore, each byte of binary data is encoded as a 2-character hexadecimal number is part of the S-record data structure; further 'sending the self-descriptive binary data structure to a target' corresponds to Sharon's fig 1 [as claim 29, 40].

30. As to claim 19, 30, Sharon disclosed 'storing a customizable directory descriptor and providing a directory of the data stored in each of the data fields within the data structure' [page 2, col 1, 0021].

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31. As to claim 20,31, Sharon disclosed 'storing a bootstrap executable and identifying a location of a second target data set within the data structure using the customizable directory descriptor' [page 1, col 1, 0004, page 2, col 1, 0021].

- 32. As to claim 21, 32, Sharon disclosed 'accessing the second target data set within the data structure' [page 1, col 1, 0004].
- 33. As to claim 22, 34, Sharon disclosed 'generating the plurality of data segments comprises generating an alignment data segment and aligning the size of the data structure for at least one of error detection and correction' [page 1, col 2, 0014].
- 34. As to claim 36, Sharon disclosed 'communicating the self descriptive binary data structure between a source communications device and a target communications device' [fig 1, page 1, col 2, 0012, line 1-3].
- 35. As to claim 38, Sharon disclosed 'processing an executable that is stored in the self-descriptive binary data structure' [page 1, col 2, 0012, line 1-8].
- 36. As to claim 26, 39, Sharon disclosed 'processing an executable comprises processing a bootstrap executable, the bootstrap executable configured to access a code image within the data structure' [page 1, col 1, 0004].

37. As to claim 27, Sharon teaches a system which including 'a method for communicating binary data' [see fig 1, Abstract]':

'providing a self-descriptive binary data structure at a source communications device' [fig 1, page 1, col 2, 0012, line 1-8], Sharon specifically teaches target and host or source system connected to a communication link as detailed in fig 1, further, Sharon also suggests common formats for transport program particularly, "Intel standard HEX" files as well as s-records [page 1, col 2, 0012],

'self-descriptive binary data structure having a customizable directory descriptor, the customizable descriptor configured to provide a directory of the data stored in each of the data fields within the data structure' [page 2, col 1, 0021], Sharon teaches "binary data structure' particularly referred to as "iAN files", further, typically binary data structure is identified with specific records for example \$1,\$2,\$3 and each record has record length, address portion, code/data portion and like is part of the data structure and directory of the data stored;

'communicating the self-descriptive binary data structure between source communication device and a target communication device via a communications network' [fig 1 page 1, col 2, 0012, line 1-3, 0013]

'processing the self-descriptive binary data structure at the target communications device executing a bootstrap executable, the bootstrap executable configured to reference the customizable directory descriptor and to identify a location of a second target data set within the data structure using the customizable directory descriptor'[page 1, col 1, 0004, page 2, col 1, 0021, fig 1-2].

38. As to claim 33, Sharon disclosed 'wherein the data structure descriptor comprises at least one of data structure version descriptor' [page 1, col 1, 0003], 'a data structure name descriptor' [page 1, col 2, 0013, line 1-2], 'a data structure type descriptor' [page 1, col 2, 0013], and a data structure count descriptor' [page 2, col 1, 0015, line 2-5].

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

- 39. Claims 15,24,28,37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sharon et al. [hereafter Sharon], US Publication No. 20030229707 filed on June 6, 2002, published on Dec 11,2003 as applied to claim 13,18, 29 above, further in view of Brown, US Patent No. 6839825
- 40. As to claim 15,24,28,37 Sharon disclosed 'the source communication device is further configured to generate the self-descriptive binary data structure fig 5, page 2, col 2, col 1, 0022, line 1-2, 0026, line 1-4], however, Sharon does not specifically

data structure' [col 1, line 66-67, col 2, line 1-2, fig 2A].

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teach 'a non-binary data structure'. On the other hand, Brown disclosed "non-binary

It would have been obvious to one of the ordinary skill in the art at the time of applicant's invention to incorporate the teachings of Brown into rapid file transfer to embedded system of Sharon et al. because both Sharon and Brown specifically teach "binary data structure' [see Sharon: page 2, col 2, 0021, fig 2-3; Brown: col 2, line 33-35], both Sharon and Brown suggests embedded memory system [Sharon: page 1, col 2, 0012, line 1-3; Brown: col 1, line 23-25].

One of the ordinary skill in the art at the time of applicant's invention to incorporate the teachings of Brown into rapid file transfer to embedded system of Sharon et al. because that would have allowed users of Sharon's data structure to implement segments physically mapped into binary memory structure, further portion of the non-binary width data structure stored per logical row in the first binary memory block stores twelve entries, while the width of the entry is 21-bits, the non-binary data structure stores 16 entries and n is 15 [col 2, line 22-32], thus bringing the advantages of minimizing memory required for storing non-binary width data structures as suggested by Brown [col 1, line 58-61].

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# Response to Arguments

41. Applicant's arguments filed on 5/7/2007 with respect to claims 1-15,17-22,24,26-40 have been fully considered and for examiner's response, see discussion below:

a) At page 17, claims 1-14,16-23,25-27,29-36,38-40, applicant argues that it is further noted that applicant simply arguing [page 17] that as claimed, the self-descriptive binary data structure includes various features not mentioned by Sharon.

As to the above argument [a], examiner disagree with the applicant because Sharon specifically teaches not only s-record, but also specified "s-record format" typically including s-record type, record length in bytes, data start address, data, check sum and like is part of any typical "self-descriptive" data structure, furthermore, applicant argues data structure includes various features without "specifying", various feature[s], but merely arguing without any support.

b) At page 17-18, claims 1-14,17-22,26-27,29-30, applicant argues that "Sharon does not teach a self-descriptive binary data structures, but in fact Sharon dismisses binary structures by stating not needing binary protocols, therefore, Sharon does not teach a binary system

As to the above argument [b] ,examiner disagree with the applicant because, firstly Sharon is directed to transferring data from host system to target system

[see fig 1, Abstract], particularly, Sharon teaches file format or data structure [page 1, col 2, 0010, line 1-4]; secondly, Sharon teaches "s-records" is defined as "self-descriptive binary data structure" because, typically, "s-records" would have character strings made of several fields which identify the record type, record length, memory address, code, data and like is part of the "s-records" data structure corresponds to self=descriptive binary data structure [page 2, 0016-0019], thirdly, Sharon teaches records holding a description of file or a data containing program code in a specific location or address, further data segment typically one of the section of data or code as detailed in page 2, col 1, 0015. Since applicant has not specified how the amended language distinguishes the claimed invention from Sharon beyond simply asserting that it does without any further support.

Therefore, Applicant's remarks are deemed not to be persuasive, and claims 1-14,17-22,26-27,29-36,38-40 stand rejected under 35 USC 102(e) as being clearly anticipated by Sharon et al.

c) At page 18-19, claims 15,24,28,37, applicant argues that "Applicants previously argued that prima facie obviousness had not been established because both Brown and Sharon do not teach binary data stretures.

As to the above argument [c], as best understood by the examiner, Sharon teaches "binary data structure" because Sharon specifically suggests "s-records" typically identify the program code or data is in "binary form", further records are converted to another format or data structure referred to an "iAN files", further, examiner

recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

In this case, Sharon is directed to rapid file transfer to embedded system, more specifically transferring data from a host system to a target system that including creating a data record for transmitting data to the target [see Abstract], while Brown is directed to logically expanding the width of memory, more specifically addressing the issues of minimizing memory requirement for storing "non-binary" width data, particularly, data structure [see Brown: Abstract], Sharon also does teaches sequence of data into a memory of the target system particularly related to S-record [see fig 2, page 1, col 2, 0014], also both Sharon, Brown specifically teach "binary data structure [see Sharon: page 2, col 2, 0021, fig 2-3; Brown: col 2, line 33-35], and both Sharon, Brown suggests embedded memory system [see Sharon: page 1, col 2, 0012; Brown: col 1, line 23-25].

Therefore, one of the ordinary skill in the art at the time of applicant's invention to incorporate the teachings of Brown into rapid file transfer to embedded system of Sharon et al. because both Sharon, Brown specifically directed to "data structures", particularly, users of Sharon's data structure to implement segments physically mapped into binary memory structure, while portion of the non-binary width in the data structure

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stored in accordance with the requirements of logical row in the first binary memory for example width of the entry is 21-bits, the non-binary data structure stores 16 entries [see Brown: col 2, line 22-32], thus bringing the advantages of minimizing memory requirement for storing "non-binary data structure" as suggested by Brown: [see col 1, line 58-61].

Therefore, Applicant's remarks are deemed not to be persuasive, and claims 15,24,28,37 stand rejected under 35 USC 103(a) as being unpatentable over Sharon in view of Brown.

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#### Conclusion

### The prior art made of record

a. US Pub.No. . 20030229707

b. US Patent .No. . 6839825

42. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Srirama Channavajjala whose telephone number is 571-272-4108. The examiner can normally be reached on Monday-Friday from 8:00 AM to 5:30 PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alam, Hosain, T, can be reached on (571) 272-3978. The fax phone numbers for the organization where the application or proceeding is assigned is 571-273-8300 Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free)

sc Patent Examiner. July 20, 2007.

